THE CITY OF REDMOND
Special Inspection Requirements

In accordance to Section 1701, 1704, and 1707 of the current adopted International Building Code (IBC), the ***owner***, or the ***registered design professional in responsible charge*** acting as the owner's agent, is required to hire an independent testing/inspection agency to perform required special inspections.

The independent agency hired to perform the duties of special inspection is required to be a registered agency with Washington Association of Building Officials (WABO), under the Special Inspection Registration Program (SIRP) Standard No. 1701 or most current adopted special inspection standard published by WABO.

The testing agency shall complete the attached forms and submit them to the Building Division prior to issuance of the building permit. For projects requiring continuous inspection, the agency shall submit the name and qualifications of the individual(s) assigned to the project. The inspectors assigned to any project within the City shall be currently registered with WABO, and certified for the disciplines assigned.

A. Contractor's Responsibilities

1. Notify the agency

The contractor is responsible for notifying the inspection agency in sufficient time for scheduling personnel to perform required inspections.

2. Provide access to City of Redmond approved plans

The approved City plans shall be readily accessible at the job site.

3. Retaining special inspection reports at the job site

The contractor is also responsible for retaining at the job site all special inspection records submitted by the special inspector, and providing these records for review by the Building Department's inspector upon request.

B. Duties of the Special Inspector

1. Observe work

The inspector shall observe the work for compliance with the City approved (stamped) plans, specifications, and applicable provisions of the IBC. The architect/engineer's reviewed shop drawings, and/or placement drawings, may be used only as an aid to inspections.

Continuous Special Inspection - Means the same inspector is on site day to day observing the work requiring special inspections. Sometime referred to as the Resident Inspector, etc.

Periodic Special Inspection - Some inspections may be made on a periodic basis to satisfy the requirements of continuous inspection, provided these periodic scheduled inspections are performed as outlined in the project plans and specifications, and approved by the Building Official.

2. Report non-conforming items

The inspector shall bring non-conforming items to the immediate attention of the contractor, and note all such items in the daily report. If any item is not resolved in a timely manner and is about to be

incorporated in the work, the special inspector shall immediately notify the Building Department, the engineer or architect, his/her office, and post a discrepancy notice.

3. Furnish daily reports

The special inspector shall complete and sign a daily report for each day's inspections. The daily reports shall remain at the job site with the contractor for the Building Department's inspector. The reports shall include the following:

a. Description of the inspections, with locations and tests performed.
b. Listing any non-conforming items.
c. Include how items were resolved or unresolved.
d. List any changes or corrections to non-conforming issues authorized by the engineer, architect, or City building inspectors.

4. Furnish weekly reports

The inspection agency shall furnish weekly reports of the tests and inspections performed directly to the Building Department, project engineer, architect, and/or others as designated.

5. Furnish final report

The inspection agency shall submit a final signed report to the Building Department stating that all items requiring special inspections and testing were fulfilled, all discrepancies were corrected or resolved, and all work requiring special inspections is in conformance with the approved design drawings and specifications.

Include any items unresolved or discrepancies in coverage (i.e., missed inspections, periodic inspections when continuous was required, etc.) shall be specifically itemized in this report.

C. City's Responsibilities

1. To verify compliance

The City is required to oversee the implementation of IBC Section 1701, 1704, 1707 and the WABO - SIRP Standards 1701.

2. Approve special inspections

The Building Department shall review all special inspectors and special inspection requirements.

3. Monitor special inspections

Work requiring special inspections, and the performance of special inspectors, shall be monitored by the Building Department's inspector. The cities approval must be obtained prior to placement of concrete or other similar activities in addition to that of the special inspector.

4. Issue Certificate of Occupancy

The Building Department will only issue a Certificate of Occupancy after all special inspection reports and the final report, have been submitted and accepted.

D. Owner Responsibilities

The owner, the design professional in responsible charge acting as the owner's agent, shall fund special inspection services. The owner is responsible for seeing that these requirements are met.

E. Registered Design Professional Responsibilities

1. The registered design professional in responsible charge (engineer, or architect), shall include special inspection requirements and specifications on the plans. Provide structural observation Per Section 1709 as ammended by the State of Washington.

2. Prepare the Quality Assurance Plan for Seismic Resistance in accordance with IBC section 1705 and identify Structural Testing for Seismic Resistance per IBC section 1708 (When required).

3. Review the special inspection reports and provide corrective action for work that may not conform to the approved plans.

ACKNOWLEDGMENTS

I have read and agree to comply with the terms and conditions of this agreement.

Owner/ Agent:_____ **By:**_____ **Date:**_____

Contractor:_____ **By:**_____ **Date:**_____

Inspection Agency:_____ **By:**_____ **Date:**_____

Registered Design Professional in Resp. Charge:_____ **By:**_____ **Date:**_____

Return this original agreement along with the attached form to:

Building Division
City of Redmond Permit Center
15670 NE 85th Street
P.O. Box 97010
Redmond, Washington, 98073-9710

THE CITY OF REDMOND
Special Inspection Agency Information Form

PROJECT _____ PERMIT # _____

ADDRESS _____ DATE _____

TESTING AGENCY _____ PHONE # _____

ADDRESS _____ CITY _____ ZIP _____

ASSIGNED INSPECTOR _____

DESIGN PROFESSIONAL _____ COMPANY _____

ADDRESS _____ CITY _____ ZIP _____

Check Required Special Inspections per International Building Code, Section 1701/1704/1707:

(Indicate required items in IBC tables 1704.3, 1704.4, 1704.5.1, 1704.5.3 attached)

___ 1. Structural Welding (Steel 1704.3.1)

___ 2. High Strength Bolting (Steel 1704.3.3)

___ 3. Structural Concrete (1704.4)

___ 4. Reinf. steel/ prestressing tendons (1704.4)

___ 5. Shotcrete (1704.4)

___ 6. Structural Masonry (1704.5)

___ 7. High Load Diaphragms (Wood 1704.6)

___ 8. Grading, excavation, and filling (Soils 1704.7)

___ 9. Pile Foundations (1704.8)

___ 10. Pier Foundations (1704.9)

___ 11. Sprayed Fire-Resistant Materials (1704.11)

___ 12. Ext. Insul. and Fin. System (EIFS 1704.12)

___ 13. Expansion and Adhesive Anchors (1704.13)

___ 14. Smoke Control (1704.14)

___ 15. Cont. SI for Struct. Welding (SISR 1707.2)

___ 16. Structural Wood (SISR 1707.3)

___ 17. Cold-Formed Steel Framing (SISR 1707.4)

___ 18. Stor. Racks and Access Flrs. (SISR 1707.5)

___ 19. Architectural Components (SISR 1707.6)

___ 20. Mech. and Elec. Components (SISR 1707.7)

___ 21. Other inspections as required by the Design Professional or the Building Official (1704.13).

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TABLE 1704.3
REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]	IBC REFERENCE
1. Material verification of high-strength bolts, nuts and washers:				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	—	X	Applicable ASTM material specifications; AISC 335, Section A3.4; AISC LRFD, Section A3.3	—
b. Manufacturer's certificate of compliance required.	—	X	—	—
2. Inspection of high-strength bolting:				
a. Bearing-type connections.	—	X	AISC LRFD Section M2.5	1704.3.3
b. Slip-critical connections.	X	X		
3. Material verification of structural steel:				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	—	—	ASTM A 6 orASTM A 568	1708.4
b. Manufacturers' certified mill test reports.	—	—	ASTM A 6 or ASTM A 568	
4. Material verification of weld filler materials:				
a. Identification markings to conform to AWS specification in the approved construction documents.	—	—	AISC, ASD, Section A3.6; AISC LRFD, Section A3.5	—
b. Manufacturer's certificate of compliance required.	—	—	—	—
5. Inspection of welding: a. Structural steel:	—	—		
1) Complete and partial penetration groove welds.	X	—	AWS D1.1	1704.3.1
2) Multipass fillet welds.	X	—		
3) Single-pass fillet welds > $^5/_{16}$"	X	—		
4) Single-pass fillet welds ≤ $^5/_{16}$"	—	X		
5) Floor and deck welds.	—	X	AWS D1.3	—
b. Reinforcing steel:	—	—	AWS D1.4 ACI 318: 3.5.2	1903.5.2
1) Verification of weldability of reinforcing steel other than ASTM A 706.	—	X		
2) Reinforcing steel-resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special reinforced concrete shear walls and shear reinforcement.	X	—		
3) Shear reinforcement.	X	—		
4) Other reinforcing steel.	—	X		
6. Inspection of steel frame joint details for compliance with approved construction documents:		X	—	1704.3.2
a. Details such as bracing and stiffening.	—	—		
b. Member locations.	—	—		
c. Application of joint details at each connection.	—			

For SI: 1 inch = 25.4 mm.

a. Where applicable, see also Section 1707.1, Special inspection for seismic resistance.

TABLE 1704.4
REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]	IBC REFERENCE
1. Inspection of reinforcing steel, including prestressing tendons, and placement.	—	X	ACI 318: 3.5, 7.1-7.7	1903.5, 1907.1, 1907.7, 1914.4
2. Inspection of reinforcing steel welding in accordance with Table 1704.3, Item 5B.	—	—	AWS D1.4 ACI 318: 3.5.2	1903.5.2
3. Inspect bolts to be installed in concrete prior to and during placement of concrete where allowable loads have been increased.	X	—	—	1912.5
4. Verifying use of required design mix.	—	X	ACI 318: Ch. 4, 5.2-5.4	1904, 1905.2-1905.4, 1914.2, 1914.3
5. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	—	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1905.6, 1914.10
6. Inspection of concrete and shotcrete placement for proper application techniques.	X	—	ACI 318: 5.9, 5.10	1905.9, 1905.10, 1914.6, 1914.7, 1914.8
7. Inspection for maintenance of specified curing temperature and techniques.	—	X	ACI 318: 5.11-5.13	1905.11, 1905.13, 1914.9
8. Inspection of prestressed concrete: a. Application of prestressing forces. b. Grouting of bonded prestressing tendons in the seismic-force-resisting system.	X X	—	ACI 318: 18.20 ACI 318: 18.18.4	—
9. Erection of precast concrete members.	—	X	ACI 318: Ch. 16	—
10. Verification of in-situ concrete strength, prior to stressing of tendons in posttensioned concrete and prior to removal of shores and forms from beams and structural slabs.	—	X	ACI 318: 6.2	1906.2

For SI: 1 inch = 25.4 mm.

a. Where applicable, see also Section 1707.1, Special inspection for seismic resistance.

TABLE 1704.5.1
LEVEL 1 SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY OF INSPECTION		REFERENCE FOR CRITERIA		
	Continuous during task listed	Periodically during task listed	IBC section	ACI 530/ASCE 5/TMS 402[a]	ACI 530.1/ASCE 6/TMS 602[a]
1. As masonry construction begins, the following shall be verified to ensure compliance:					
a. Proportions of site-prepared mortar.	—	X	—	—	Art. 2.6A
b. Construction of mortar joints.		X			Art. 3.3B
c. Location of reinforcement and connectors.		X			Art. 3.4, 3.6A
d. Prestressing technique.	—	X	—	—	Art. 3.6B
e. Grade and size of prestressing tendons and anchorages.	—	X	—	—	Art. 2.4B, 2.4H
2. The inspection program shall verify:					
a. Size and location of structural elements.	—	X	—	—	Art. 3.3G
b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.	—	X	—	Sec. 1.2.2(e), 2.1.4, 3.1.6	—
c. Specified size, grade and type of reinforcement.	—	X	—	Sec. 1.12	Art. 2.4, 3.4
d. Welding of reinforcing bars.	X	—	—	Sec. 2.1.10.6.2, 3.2.3.4(b)	—
e. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).	—	X	Sec. 2104.3, 2104.4	—	Art. 1.8C, 1.8D
f. Application and measurement of prestressing force.	—	X	—	—	Art. 3.6B
3. Prior to grouting, the following shall be verified to ensure compliance:					
a. Grout space is clean.	—	X	—	—	Art. 3.2D
b. Placement of reinforcement and connectors and prestressing tendons and anchorages.		X		Sec. 1.12	Art. 3.4
c. Proportions of site-prepared grout and prestressing grout for bonded tendons.		X		—	Art. 2.6B
d. Construction of mortar joints.		X		—	Art. 3.3B
4. Grout placement shall be verified to ensure compliance with code and construction document provisions.	X	—	—	—	Art 3.5
a. Grouting of prestressing bonded tendons.	X	—	—	—	Art. 3.6C
5. Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed.	X	—	Sec. 2105.2.2, 2105.3	—	Art. 1.4
6. Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.	—	X	—	—	Art. 1.5

For SI: °C = (°F - 32)/1.8.

a. The specific standards referenced are those listed in Chapter 35.

TABLE 1704.5.3
LEVEL 2 SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY OF INSPECTION		REFERENCE FOR CRITERIA		
	Continuous during task listed	Periodically during task listed	IBC section	ACI 530/ ASCE 5/ TMS 402[a]	ACI 530.1/ ASCE 6/ TMS 602[a]
1. From the beginning of masonry construction, the following shall be verified to ensure compliance:					
a. Proportions of site-prepared mortar, grout and prestressing grout for bonded tendons.	—	X	—	—	Art. 2.6A
b. Placement of masonry units and construction of mortar joints.	—	X	—	—	Art. 3.3B
c. Placement of reinforcement, connectors and prestressing tendons and anchorages.	—	X	—	Sec. 1.12	Art. 3.4, 3.6A
d. Grout space prior to grouting.	X	—	—	—	Art. 3.2D
e. Placement of grout.	X	—	—	—	Art. 3.5
f. Placement of prestressing grout.	X	—	—	—	Art. 3.6C
2. The inspection program shall verify:					
a. Size and location of structural elements.	—	X	—	—	Art. 3.3G
b. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.	X	—	—	Sec. 1.2.2(e), 2.1.4.3.1.6	—
c. Specified size, grade and type of reinforcement.		X	—	Sec. 1.12	Art. 2.4, 3.4
d. Welding of reinforcment.	X	—	—	Sec. 2.1.10.6.2, 3.2.3.4(b)	—
e. Protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).	—	X	Sec. 2104.3, 2104.4	—	Art. 1.8C, 1.8D
f. Application and measurement of prestressing force.	X	—	—	—	Art. 3.6B
3. Preparation of any required grout specimens, mortar specimens and/or prisms shall be observed.	X	—	Sec. 2105.2.2, 2105.3	—	Art. 1.4
4. Compliance with required inspection provisions of the construction documents and the approved submittals shall be verified.	—	X	—	—	Art. 1.5

For SI: °C = (°F - 32)/1.8.
a. The specific standards referenced are those listed in Chapter 35.